Abstract of the Disclosure

A device for detecting bacteria in a perishable food product includes a gas-permeable sensor housing positionable within an interior of food packaging. A pH indicator is positioned within the housing for detecting a change in a gaseous bacterial metabolite concentration that is indicative of bacterial growth, wherein a pH change is effected by a presence of the metabolite. The housing and the pH indicator are preferably safe for human consumption. A method for detecting bacteria in a perishable food product includes supporting a food product by a food packaging element and positioning a gas-permeable sensor housing within an interior of the food packaging element, the sensor including a pH indicator. The food product and the housing are sealed within the food packaging, and the pH indicator is monitored for a bacterial concentration in the food product in excess of a predetermined level.